

## CLAIMS

1. A system for accessing a surgical target site, comprising the steps of:  
a distraction system for creating a distraction corridor;  
a retractor system dimensioned to be received within said distraction corridor,  
5 said retractor system having a plurality of retractor blades simultaneously introduced  
into said distraction corridor which are dimensioned to be simultaneously opened to  
create an operative corridor to said surgical target site.
2. The system of claim 1, wherein said distraction system includes a K-wire and  
10 at least one dilator capable of being slideably passed over said K-wire to perform  
said distraction.
3. The system of claim 2 and further, comprising at least one shim element  
capable of being detachably engaged with at least one of said plurality of retractor  
15 blades.
4. The system of claim 1 and further, comprising a handle having a plurality of  
arm members, wherein each of said plurality of arm members are integrally formed  
together with a respective one of said plurality of retractor blades.  
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5. The system of claim 1, wherein at least one of said distraction system and  
said retraction system includes at least one stimulation electrode.
6. The system of claim 5, further comprising a control unit capable of  
25 electrically stimulating said at least one stimulation electrode, sensing a response of a  
nerve depolarized by said stimulation, determining a direction from at least one of  
said distraction system and one of said retractor blades to the nerve based upon the  
sensed response, and communicating said direction to a user.

7. The system of claim 6, further comprising an electrode configured to sense a neuromuscular response of a muscle coupled to said depolarized nerve, the electrode being operable to send the response to the control unit.

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8. The system of claim 2, wherein said K-wire has a first stimulation electrode at a distal tip of the K-wire.

9. The system of claim 1, wherein said system for establishing an operative  
10 corridor to a surgical target site is configured to access a spinal target site.

10. The system of claim 1, wherein said system for establishing an operative corridor to a surgical target site is configured to establish said operative corridor via a lateral, trans-psoas approach.

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11. The system of claim 6, further comprising a handle coupled to at least one of said distraction assembly and one of said retractor blades, the handle having at least one button for initiating the electrical stimulation from said control unit to said at least one stimulation electrode.

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12. The system of claim 6, wherein the control unit comprises a display operable to display an electromyographic (EMG) response of the muscle.

13. The system of claim 6, wherein the control unit comprises a touch-screen  
25 display operable to receive commands from a user.

14. The system of claim 6, wherein the stimulation electrodes are positioned near a distal end of at least one of the initial distraction system and one of said retractor blades.
- 5 15. A method of accessing a surgical target site, comprising the steps of:  
creating a distraction corridor to the surgical target site;  
simultaneously introducing a plurality of retractor blades for retracting from said distraction corridor to create an operative corridor to said surgical target site.
- 10 16. The method of claim 15, wherein said step of creating a distraction corridor is accomplished by using a K-wire and at least one dilator capable of being slideably passed over said K-wire.
- 15 17. The method of claim 15, wherein said step of simultaneously introducing a plurality of retractor blades includes the sub-step of detachably engaging at least one shim element with at least one of said plurality of retractor blades.
18. The method of claim 17, wherein one shim element is detachably coupled to a retractor blade disposed near the posterior region of the spine.
- 20 19. The method of claim 15, further comprising the step of providing a control unit capable of electrically stimulating said at least one stimulation electrode, sensing a response of a nerve depolarized by said stimulation, determining a direction from a surgical accessory to the nerve based upon the sensed response, and communicating  
25 said direction to a user.